

# CLIMATE NEWS

From Sheldon Whitehouse, Barbara Boxer, and Jeff Merkley

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## Colorado Floods Created By Hot September, Long Monsoon Season



Colorado's monsoon rain season typically ends by August, but this year it lingered into September. And its Front Range cities—which include Boulder and Colorado Springs—rarely see 97 degree days in September, as they did this year. This created conditions for a violent transition from intense heat to heavy rain, because warm air holds more water vapor. The collision of the monsoon rains with the high-pressure heat dome formed a giant, stalled, wet weather system. In 24 hours, Boulder was deluged with half of the precipitation it sees in an average year. In five days, more rain fell on the city than during the entire year before the storm. Russ Schumacher, a Colorado State University researcher, calculated that much of Boulder County and parts of several others got as much rain in 48 hours as they are likely to see in a thousand years in that time frame. Last week's rainfall is likely to make Colorado a laboratory for climate change research. "Scientists can use computer models to see how often similar events occur, both with and without the presence of greenhouse gases produced by human activity," wrote Bob Henson of the University Corporation for Atmospheric Research in Boulder. "It's then possible to estimate how much the odds of such an event have been boosted by fossil fuel use." (*Denver Post*)

## China Bans New Coal-Fired Power Plants in 3 Regions

In its latest stab at curbing the country's infamous air pollution, China has said it will ban new coal-fired power plants in three key industrial regions: the areas surrounding Beijing, Shanghai, and Guangzhou. The State Council, China's Cabinet, also plans to cut coal's contribution to the country's total primary energy use to less than 65 percent by 2017. According to the Chinese government, coal consumption made up 68.4 percent of the nation's 2011 energy use. But Martin Adams, energy editor for the Economist Intelligence Unit, said that although coal would make up a smaller proportion of total energy production, the amount being burned would continue to increase. "Of course, saying it out loud does send a signal that the government is serious about, at least, decreasing the rate at which coal consumption grows and about getting more renewables and natural gas and nuclear," he said. China's government has increasingly felt pressure from the growing middle class to clean up the country's air pollution. The State Council has acknowledged the air pollution situation as grim and harmful to people's health. (*Greenwire*)

## A Third of Food is Wasted, Making it Third-Biggest CO<sub>2</sub> Emitter

Wasted food accounts for more greenhouse gas (GHG) emissions than any country except for China and the United States, the UN Food and Agriculture Organization (FAO) said in a new report. Every year about a third of all food for human consumption, around 1.3 billion tons, is wasted, along with the energy, water, and chemicals used to produce it and dispose of it. FAO estimates that the annual footprint of wasted food is equivalent to 3.3 billion tons of carbon dioxide, suggesting that more efficient food use could contribute substantially to global efforts to cut GHGs and limit climate change. In the industrialized world, much of the waste comes from consumers buying too much and throwing food away. In developing countries, it is mainly due to inefficient farming and a lack of proper storage facilities. Food wastage reduction would avoid pressure on scarce natural resources and decrease the need to raise food production by 60 percent in order to meet the 2050 population demand. The FAO estimated the cost of the wasted food at about \$750 billion a year. (*Reuters*)

## Capping Temperature Rise Will Still Leave Many Millions Thirsty

A new study predicts that an additional 8% of the world's population (486M people) will be forced to cope with new or exacerbated water scarcity even if international agreements can halt global mean temperature rise at 2°C over preindustrial levels. However, if temperatures rise 3.5°C—the likely trajectory under current pledges to cut emissions, the study states—the population facing greater water strain would increase to 11% (668M people). Defining water scarcity as annual availability of less than 1,000 cubic meters of water per person, researchers analyzed 152 climate scenarios from 19 models, observing the climatic changes for global average temperature increases between 1.5°C and 5°C. The models showed that the Middle East, some of southern Europe, Northern Africa, and parts of the Southwest U.S. will be especially vulnerable if emissions levels continue to increase. Lead author Dieter Gerten of Germany's Potsdam Institute for Climate Impact Research noted that his study does not take population growth into account, a factor that could significantly worsen global water risk. (*ClimateWire*/erl034032)

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